

## 1. BOSC 2017 Nominations

### Self Nomination:

Yes

### Nominator Information

First Name

Last Name

Nominator Title

Street Address

City

State

Postal Code

Email Address

Phone Number

Mobile Phone

### Nominee Information

First Name

Paula

Last Name

Olsiewski

Nominee Title

Dr.

Street Address

Exemption 6

### Employment Information

Place of Employment/Work:

Alfred P. Sloan Foundation

**Work Street Address**

630 Fifth Avenue, Suite 2200

**Work City**

New York

**Work State:**

New York

**Work Postal Code**

10065

**Work Phone Number**

212-649-1658

**Work Email Address**

olsiewski@sloan.org

**Sector**

Other - Write In (Required): Philanthropy

**Qualifications****Primary Area(s) of Expertise**

Research program planning, oversight, and evaluation; science policy; environmental microbiology, indoor atmospheric chemistry, community emergency and disaster preparedness and response, risk and crisis communication, biosecurity

**Committee Preference(s)**

Executive Committee

Homeland Security Subcommittee

**Statement of Interest**

As a program director at the Alfred P. Sloan Foundation, I have created, directed and funded numerous programs that are directly relevant to the work of the BOSC, including the Bioterrorism/Biosecurity, Microbiology of the Built Environment, and Chemistry of Indoor Environments programs. I understand the organization and management of research and fully support the mission of the BOSC. I have extensive experience as a advisor and work well on committees.

**Skills/qualifications related to committee preference(s) specified**

For over a decade, I have funded much of the nongovernmental work on bioterrorism and continue to advise numerous entities. I have a deep understanding of EPA's Homeland Security Research Program. My expertise in environmental microbiology and indoor chemistry is directly applicable. I hold TS-SCI clearances

**Other Relevant Information**

I have strong leadership skills and am an excellent communicator. I have a successful track record of mentoring early career researchers. I utilize peer review to ensure high quality, focused programs at the Sloan Foundation. I have extensive experience managing cost effective research programs that result in the desired metrics and impact(s).

**CV/Resume URL**

CV/Resume not available online

**2. CV/Resume****Please upload your CV/ Resume.**

[CV-PaulaJ.OLSIEWSKI-MAY\\_2017.pdf](#)

3.

**BOSC Nomination**

May 30, 2017 15:38:55 Success: Email Sent to: tracy.tom@epa.gov

4. Thank You for your Submission!

# PAULA J. OLSIEWSKI, PH.D.

Exemption | [REDACTED] | [REDACTED]

## SUMMARY

Pioneering and visionary leader with expertise partnering with academic, governmental, and for-profit stakeholders from disparate but complementary fields to foster innovation. An extensive track record for creating communities to inspire, accelerate, and produce positive change. Recognized for a commitment to excellence, promotion of diversity and inclusion, and development of individuals and teams to develop long-term, sustainable change. Intellectually curious with a strong understanding of the research process. Distinguished and powerful role model in business, philanthropy, and science.

## SKILLS AND EXPERTISE

### Vision and Impact

- Created innovative and multidisciplinary policy and scientific research programs in biosecurity, synthetic biology, microbiology, and chemistry; including the Microbiology of the Built Environment program (MoBE).
- Pioneered Biosecurity program by raising awareness, creating community, providing credibility to the then emerging field of biosecurity, and implementing actions to reduce the threat of bioterrorism.
- Recognized the value and importance of credentialed healthcare volunteers in advance of disasters and provided a seed grant that resulted in the development of the Medical Research Corps, a national network of locally organized healthcare volunteers which has grown to 1,000 units and 200,000 doctors over the past 15 years.
- Participant in bioterrorism exercises Dark Winter, Atlantic Storm, and Black Ice which influenced US policy.

### Board Development and Leadership

- Member of the MIT Corporation, the 70+ member board of trustees of the Massachusetts Institute of Technology. Served on three Corporation Visiting Committees: Chemistry, Chemical Engineering, and HST Whitaker College (the Harvard MIT Program in Health Sciences and Technology).
- Enhanced board effectiveness at Critical Path Institute by increasing leadership team diversity, improving the structure and presentation of research summaries, conducting self-assessment, and introducing phased retirement for senior leadership.
- Identified and recruited new board members and donors in support of Asphalt Green's mission of assisting individuals of all ages and backgrounds to achieve health through a lifetime of sports and fitness. Served as Chair for 5 years and as a member of the board for 12 years. Successfully repeated board and donor development process as Board President for DFHCMNY, a local healthcare ministry.

### Development and Donor Relations

- Organized the Sloan 75<sup>th</sup> Anniversary events that celebrated Sloan's achievements and engaged stakeholders.
- Served as ambassador to alumni and external stakeholders as President of MIT Alumni Association and chaired MIT's Alumni Fund Board.
- Honored with the highest awards for fundraising and development of alumni communities from MIT and Yale University.
- Developed ongoing major annual fundraising event at Asphalt Green showcasing the organization's outreach efforts and impact on the communities served.

### Management and Mentoring

- Directed product development teams that resulted in 5 successful FDA 510(k) premarket submissions at Enzo.
- Manage and mentor professional and scientific teams in all program areas at Sloan.
- Timely and successful completion of Sloan programs including external evaluations.
- Successfully led team via consensus to a comprehensive final report with recommendations as chair of EPA HS subcommittee; worked through demanding team dynamics through persistence, fairness, and openness.
- Orchestrated fruitful collaborations with DHS, EPA, FBI, NASA and other US government agencies.
- Mentor and role model for the MIT Women in Chemistry group.

### Diversity and Inclusion

- Provided support and guidance as a member of the Advisory Committee for the MIT Initiative on Faculty Race and Diversity.
- Increased representation of women in MIT Chemistry Department as Corporation Visiting Committee member by leveraging imagination and influence to recruit new faculty.
- Member of the 3<sup>rd</sup> entering co-ed class at Yale, and one of the first female graduates of Yale College to obtain a Ph.D. in Chemistry.
- Outspoken advocate for diversity and ongoing supporter of MIT Women in Chemistry.

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## CAREER ACCOMPLISHMENTS

### Biosecurity

- Created the Ready Campaign to empower citizens to take simple life-saving actions to prepare for terrorism. Through a series of grants to the Advertising Council, Inc., Ready.gov became the official website of the Department of Homeland Security. Ready.gov continues to this day to help individuals and communities “plan, prepare, stay informed” for all types of disasters and emergencies.
- Established a learning and exchange forum for emergency managers from NYC, DC, LA and Chicago through a grant to the Council for Excellence in Government. The Big City Managers forum grew to an independent 501(c)(3) organization and expanded to 15 jurisdictions representing 30% of the US population. Several major corporations, such as Target and Sprint, are current sponsors.
- Launched worldwide Bioterrorism prevention program and Bioterrorism Prevention Unit through a series of grants to Interpol, the world’s largest international police organization.
- In collaboration with the Nuclear Threat Initiative, supported the National Academies Committee on Research Practices to Prevent the Destructive Applications of Biotechnology. The committee later produced the groundbreaking report “Biotechnology Research in the Age of Terrorism.” Known as the Fink Report (after committee chair MIT Professor Gerald Fink), the report provided a foundation for the evolving and ongoing discussions of science and national security.

### Synthetic Biology

- Developed and funded a series of activities to enable researchers, gene synthesis companies, government representatives, and other stakeholders to achieve safer governance of a new field that enables the creation of living organisms from DNA sequence information (synthetic genomics). The report, developed by a team from MIT, the Center for Strategic and International Studies, and the J. Craig Venter Institute, provided an array of options for regulating gene synthesis and informed the development of US government guidance for gene synthesis companies issued in 2010.
- Encouraged and enabled International Genetically Engineered Machine (iGEM) competition, the worldwide student team competition in synthetic biology, to embed biosafety and biosecurity practices into the competition, impacting tens of thousands of students and their projects.

### Microbiology of the Built Environment (MoBE)

- Generated public interest in this emerging scientific field of research earning coverage in the New York Times, Science, and the Wall Street Journal.

### Civic / New York City Initiatives

- Provided early support for the creation of the New York Genome Center, an independent, nonprofit academic research organization that provides core genomic services. Initial Sloan support leveraged a much larger challenge grant from the Simons Foundation. Renewed support leveraged New York State funds.
- Provided early seed support to BioBUS, a novel concept in STEM education where the field trip comes to the students by way of a bus equipped with state of the art microscopes. A follow-on Sloan grant leveraged a much larger Simons Foundation matching grant and enabled the organization to grow to over \$700K in annual operations, with an independent staff and board of directors. BioBUS has reached over 150,000 K-12 students across 500 NYC schools since its launch in 2008.

## EXPERIENCE

ALFRED P. SLOAN FOUNDATION, New York, NY

2000 – Present

### Program Director

*The Sloan Foundation Founded in 1934 by industrialist Alfred P. Sloan Jr., the Foundation is a not-for-profit grant making institution that supports high quality, impartial scientific research; fosters a robust, diverse scientific workforce; strengthens public understanding and engagement with science; and promotes the health of the institutions of scientific endeavor. (Source: Sloan.org)*

Responsible for the establishment, growth and ongoing administration of a series of programs in policy and scientific research, as well as the Civic/NYC initiatives. Responsible for program strategy development and evaluation, proposal development, annual budgeting for programs/proposals, proposal administration and grants management for over 470 grants totaling over \$160M.

- Created and directs the Foundation’s program in the Microbiology of the Built Environment, a \$47M program to grow a new multidisciplinary field of scientific inquiry focused on understanding the microbial ecology of the built environments where people work, live, and play.

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### ALFRED P. SLOAN FOUNDATION *(Continued)*

- Created and directs the Chemistry of Indoor Environments Program, a new basic research program.
- Manages grant making in the Deep Carbon Observatory (DCO) program and supervises Sloan Senior Advisor overseeing the DCO program.
- Directs the Civic/NYC Initiatives which supports New York City-based projects that advance the Foundation's mission to support research and education in science, technology, engineering, mathematics, and economics.
- Spearheaded and directed the Biosecurity Program until its successful planned conclusion and evaluation. (2011)
- Created and directed the Synthetic Biology Program until its successful planned conclusion and evaluation. (2014)

#### *Major Programs*

**The Chemistry of Indoor Environments (CIE)** – Established in 2016, the CIE program is a basic science research program established to grow a new field of scientific inquiry focused on understanding the fundamental chemistry taking place in indoor environments and how that chemistry is shaped by building attributes and human occupancy. Surprising new findings suggest that humans are the dominant source of indoor volatile organic compounds.

#### *Selected grants*

<b>University of Colorado at Boulder</b>	- Expanding understanding of chemical sources, sinks, and transformations taking place indoors
<b>University of California, Berkeley</b>	- Investigating the processes controlling indoor chemistry
<b>University of Toronto</b>	- Exploring multiphase chemistry in indoor environments

**Microbiology of the Built Environment (MoBE)** – Established in 2004, the goal of this scientific research program is to launch a new field of scientific inquiry focused on the microbiology of the air, water, and dust from built environments where people live and work. MoBE is an emerging field of research. Sloan grantees have elucidated the sources as well as the spatial, temporal, and taxonomic distribution of microorganisms in buildings. MoBE continues to grow in research activity and interests, and US government funders including the Environmental Protection Agency, the Department of Housing and Urban Development, and the Department of Justice, are supporting MoBE projects in Sloan funded labs. Sloan is collaborating with NASA to support post-doctoral fellowships to study the microbiology of the International Space Station.

#### *Selected grants*

<b>University of Oregon</b>	- Biology and Built Environment Center
<b>University of California, Davis</b>	- Microbiology of the Built Environment Network
<b>University of Chicago</b>	- Hospital Microbiome Project
<b>University of Colorado at Boulder</b>	- Examining how and why house associated microbial communities vary across homes throughout the United States

NEO/TECH CORP. New York, NY

1991 – 2000

#### **President**

*A consulting practice focused on technology development bridging the interests of technology companies, academia, and governmental agencies on high impact issues.*

- Directed the New York City Biotechnology Initiative, a state-funded program under the New York Biotechnology Association, to improve the region's ability to grow biotechnology companies by fostering relationships between industry and academia.
- Established and directed the technology transfer program at the Hospital for Special Surgery, affiliated with Weill Medical College of Cornell University. (1995 – 1999)
- Identified and facilitated the acquisition of healthcare royalty interests for Paul Capital Partners.

ENZO BIOCHEM, INC., New York, NY

1982 – 1991

**Vice President, Product Development**, Diagnostics Division (1990 – 1991)

Director, Regulatory and Clinical Affairs (1985 – 1990)

Associate Investigator (1982 – 1985)

*A public biotechnology company focused on the manipulation and modification of nucleic acids to produce therapeutic and diagnostic products. Responsible for the administration and overall management of product development, technology licensing, and transfer programs.*

- Directed the Product Development committee, which included representatives from sales & marketing, manufacturing, quality control/quality assurance, clinical studies, and regulatory affairs.
- Responsible for five successful FDA 510(k) premarket submissions: two ColorGene DNA Hybridization Tests for Herpes Simplex Virus, two ColorGene DNA Hybridization Tests for Cytomegalovirus, and one Hemagel Test for Fecal Occult Blood.

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ENZO BIOCHEM, INC., (Continued)

- Established Good Manufacturing Practices for *in vitro* diagnostic products.
- Company representative for FDA inspections.
- Inventor on US Patent 9,134,302: “Analyte detection utilizing polynucleotide sequences, composition, process and kit.”

### EDUCATION

**New York University**, Postdoctoral Fellow with William H. Beers. (1980 – 1982)

**Massachusetts Institute of Technology**, Ph.D. Biological Chemistry with Christopher Walsh. (1979)

**Yale College**, B.S. in Chemistry, cum laude. (1975)

### AWARDS AND RECOGNITION

**Hall of Fame for Extraordinary Achievement** (2014)

**Biosecurity Achievement Award** (2011)

**Bronze Beaver Alumni Award** (2000)

**Kane Alumni Award** (1995)

**Distinguished Service Award** (2000)

**Chairman's Award** (1994, 2007)

**Al Gordon Humanitarian Award** (2006)

**National Philanthropy Day Award** (1998)

Stoughton High School, Stoughton, MA

Center for Biosecurity of UPMC, Washington, DC

Massachusetts Institute of Technology, Cambridge, MA

Massachusetts Institute of Technology, Cambridge, MA

Yale University, New Haven, CT

Yale University, New Haven, CT

Asphalt Green, New York, NY

Asphalt Green, New York, NY

### BOARD AND PROFESSIONAL ASSOCIATIONS

**Vencore**, Consultant. A private defense contractor that serves the US Intelligence Community, and other agencies. Previously a consultant with Scitor/SAIC. Top Secret-SCI security clearance. (2009 – present)

**Homeland Security Research Subcommittee of the Board of Scientific Counselors, US Environmental Protection Agency**, Chair. (2014 – 2017)

**Board of Scientific Counselors, US Environmental Protection Agency**, Executive Committee. (2014 – 2017)

**Phylagen**, Scientific Advisor. A venture-backed microbiome data analytics company. (2016 – present)

**MIT Corporation**, Member. The Board of Trustees of the Massachusetts Institute of Technology. (2003 – 2009)

**Critical Path Institute**, Board of Directors. C-Path orchestrates the sharing of data, expertise and knowledge among industry, regulatory authorities, government, patient advocacy groups and academia in the pre-competitive space to generate the evidence needed to improve the drug development pathway. (2015 – present)

**AAAS**, Member. Section on Societal Impacts of Science and Engineering Electorate Nominating Committee. (2016 – 2019)

**WMD Center's Bio-Response Report Card**, Board of Advisors. (2011)

**Emergency Preparedness Advisory Committee for Chicago Metropolitan Agency Planning (CMAP)**, Chicago, IL. The “Go To 2040” project was co-lead by the American Red Cross of Greater Chicago and CMAP. (2008 – 2009)

**National Consortium for the Study of Terrorism and Responses to Terrorism (START)**, Advisor. A Center of Excellence of the US Department of Homeland Security based at the University of Maryland. (2005 – 2012)

**NRC Committee on Advances in Technology and the Prevention of Their Application to Next Generation Biowarfare Threats**. Committee produced the “Globalization, Biosecurity, and the Future of Life Sciences” report. (2006)

### ACADEMIA AND COMMUNITY

**Massachusetts Institute of Technology**, Corporation Member (2003–2009), Initiative on Faculty Race and Diversity Advisory Committee (2008 – 2009), Committee for Annual Fund Goals (1998 – 2006), Corporation Committee on the Presidency (2003 – 2004), MIT Corporation Visiting Committees: Chemistry (1994 – 2009), HST Whitaker College (2001 – 2011), Chair (2004 – 2009), Chemical Engineering (2004 – 2009), Alumni Association, President (2003 – 2004), Alumni Association Board of Directors (1998–2006), Committee for Awards (2005 – 2008), Alumni Fund Board, Chair (1998 – 2000), Alumni Fund Board Member (1993 – 2000), Campaign 2000 Steering Committee (2003 – 2004), Alumni Association Campaign Strategy Committee (1998 – 1999), Friends of DAPER (2004 – 2005), Online Services for Subcommittee of Association Board (1999 – 2000), Alumni Fund Visiting Program (1991, 1993), Graduate Alumni Seminar Series (2004), Young Alumni Seminar Series (2004), Alumni Engagement Event Speaker (2002)

**Yale University**, Alumni Fund Board (1993 – 1998; 2000 – 2005; 2006 – 2010), Yale Class of 1975: 20<sup>th</sup> & 25<sup>th</sup> Reunion Gift Committee, Class of 1975 Alumni Fund Co-Chair of Agents (1991 – present)

**Spondylitis Association of America**, Trustee (2013 – present)

**Dominican Friars Health Care Ministry of New York**, Board President (2014 – 2016)



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### ACADEMIA AND COMMUNITY (Continued)

**Asphalt Green, Inc.**, Board of Trustees (1997-2009); Chair (2000 – 2005)

**333 East 68th Street Corporation**, President of Co-op Board (1993 – 2003)

**Center for Biotechnology at Stony Brook**, Reviewer, Innovative Technology Grant Program (1995 – 2000)

**Biotechnology Industry Organization**, "BIO '98" Host Committee (1998)

### SELECTED TALKS

"Chemistry of Indoor Environments" – Department of Chemistry, University of Toronto. (2017)

"Microbiology of the Built Environment" – 13<sup>th</sup> Genomic Standards Consortium Meeting, Shenzhen China. (2012)

"Sloan's Bioterrorism Program" – Keynote presentation to John D. Solomon Fellows, New York City

Office of Emergency Management. (2013)

"Societal Issues in Synthetic Biology" – Applied Industrial Synthetic Biology Conference, Freiburg, Germany. (2009)

### SELECTED PUBLICATIONS

Gilbert J, Smith D, Shogun B, Packman A, Kelley S, Landon E, Bhangar S, Vora G, Jones R, Keegan K, Stephens B, Ramos T, Kirkup B, Levin H, Rosentahl M, Foxman B, Change E, Siegel J, Cobey S, An G, Alverdy J, Olsiewski PJ, Martin M, Marrs R, Hernandez M, Christle S, Morowitz M, Weber S. The Hospital Microbiome Project: Meeting report for the 2nd Hospital Microbiome Project, Chicago, USA, January 15th, 2013. *Standards in Genomic Sciences*. 2013;8:571–9.

Smith D, Alverdy J, An G, Coleman M, Garcia-Houchins S, Green J, Keegan, K, Kelly S, Kirkup B, Kociolek L, Leven H, Landon E, Olsiewski, PJ, Knight R, Siegel J, Weber S, Gilbert J. The Hospital Microbiome Project: Meeting Report for the 1st Hospital Microbiome Project Workshop on sampling design and building science measurements, Chicago, USA, June 7th-8th 2012. *Standards in Genomic Sciences*. 2013;8:112–7.

Haynie SL, Hinkle AS, Jones NL, Martin CA, Olsiewski PJ, Roberts MF. Reflections on the journey: six short stories. *Chemistry Central Journal*. 2011;5.

Morse, SS, Garwin, RL, Olsiewski PJ, Next flu pandemic: what to do until the vaccine arrives? *Science*. 2006; 314:929.

Hitchcock PJ, Mair M, Inglesby TV, Gross J, Henderson DA, O'Toole T, Ahern-Seronde J, Bahnfleth W, Brennan T, Barney Burroughs HE, Davidson C, Delp W, Ensor DS, Gomory R, Olsiewski PJ, Samet JM, Smith WM, Streifel AJ, White RH, & Woods JE. Improving performance of HVAC systems to reduce exposure to aerosolized infectious agents in buildings; recommendations to reduce risks posed by biological attacks. *Biosecurity and bioterrorism: biodefense strategy, practice, and science*. 2006;4:41–54.

Beers, WH., & Olsiewski, PJ. Junctional communication and oocyte maturation. *Gap Junctions*. Michael Bennett and David Spray, editors. 1985;307-314, Cold Spring Harbor Press.

Olsiewski PJ., & Beers WH. cAMP synthesis in the rat oocyte. *Developmental Biology*. 1983;100:287–93.

Haldar K, Olsiewski PJ, Walsh C, Kaczorowski GJ, Bhaduri A, Kaback HR. Simultaneous reconstitution of Escherichia coli membrane vesicles with D-lactate and D-amino acid dehydrogenases. *Biochemistry*. 1982;21:45906.

Olsiewski PJ, Kaczorowski GJ, Walsh C, Kaback HR. Reconstitution of Escherichia coli membrane vesicles with D-amino acid dehydrogenase. *Biochemistry*. 1981;20:6272–9.

Olsiewski, PJ, Kaczorowski, GJ, and Walsh, C. Purification and properties of a membrane-bound D-Amino acid dehydrogenase from Escherichia coli B. *Journal of Biological Chemistry*. 1980;255,4487.